

REMARKS

Request for Reconsideration, Informal Matters, Claims Pending

The application stands subject to a non-final Office action mailed on 30 October 2007. Reconsideration of the claimed invention in view of the amendments above and the discussion below is respectfully requested. A one month extension under 37 CFR 1.136(b) has been requested.

Claim 27, 30 and 32 were amended in light of the recent Federal Circuit ruling in In re Nuijten. The claims now read that the data structure is stored on a computer-readable medium.

Claims 1-13 and 18-24 stand allowed.

Claims 1-35 are pending.

Arguments re: Mildh

Rejection Summary

Claims 14-17, 25 and 34-36 stand rejected under 35 USC 102(e) for anticipation by U.S. Publication No. 2002/0193139 (Mildh).

Discussion of Claim 14

Regarding Claim 14, Mildh fails to disclose a

... method in a communication device, the method comprising:
receiving system information,
the system information including pointer information indicating
where the communication device may obtain information about

multiple core networks sharing a common access network from which the system information was received;

attempting to connect to one of the multiple core networks using the information about multiple core networks sharing the common access network from which the system information was received.

Claim 14 is directed to providing a communication terminal "pointer information" about multiple core networks that share a common access network. Mildh discloses selection among different access networks, i.e., GERAN or UTRAN access technologies. The various passages of Mildh referenced by the Examiner do not support the asserted rejection. In Mildh, at paragraph [0009], Mildh discusses providing a mobile station (MS) with operating mode instructions when the MS enters a cell supporting 2G and 3G operation based on MS history. At paragraph [0010], Mildh discusses network selection hysteresis control. In Mildh, at paragraph [0015], access network selection (GERAN or UTRAN) is based on registration information in the HLR wherein the network selects the access technology for the mobile station. At paragraph [0016], Mildh teaches broadcasting a value indicating which access network (GERAN or UTRAN) the MS should camp on. At paragraph [0017], Mildh discloses default operating mode rules. At paragraph [0018], Mildh discloses a network controlled operating mode (2G or 3G) selection for a mobile station, wherein a system information message provides cell specific operating mode selection rules to the mobile station. At paragraph [0019], Mildh discusses system information messages for communicating the mode selection rules to the mobile stations. At paragraphs [0029-32], Mildh discusses system information messages for distributing mode selection rules to mobile stations entering 3G capable cells. Mildh nevertheless fails to disclose a communication device that receives system information "... including pointer information indicating where the communication device may obtain

information about multiple core networks sharing a common access network ...” as in Claim 14. Claim 14 is thus patentably distinguished over Mildh.

Discussion of Claim 15

Regarding Claim 15, Mildh fails to disclose in combination with the limitations of Claim 15,

... selecting the one of the multiple core networks to which the communication device attempts to connect using the information about multiple core networks sharing the common access network from which the system information message was received.

In Mildh, at paragraph [0018], the system information message dictates the mobile stations the mode of operation. There is no pointer information. Claim 15 is thus further patentably distinguished over Mildh.

Discussion of Claim 16

Regarding Claim 16, Mildh fails to disclose in combination with the limitations of Claim 14 “... obtaining an identity for the core network to which the communication device attempts to connect using the pointer information.” At paragraph [0016], Mildh teaches broadcasting a value indicating which access network (GERAN or UTRAN) the MS should camp on. As noted, Mildh does not send “pointer information”. Claim 16 is thus further patentably distinguished over Mildh.

Discussion of Claim 17

Regarding Claim 17, Mildh fails to disclose in combination with the limitations of Claim 14,

... the system information including a common identity for the multiple core networks sharing the common access network,
attempting to connect to one of the multiple core networks sharing the common access network from which the system information was received upon satisfaction of a condition,
attempting to connect to a core network using the common identity when the condition is not satisfied.

At paragraph [0016], Mildh teaches broadcasting a value indicating which access network (GERAN or UTRAN) the MS should camp on. At paragraph [0017], Mildh discloses default operating mode rules. Contrary to the Examiner's suggestion, Mildh fails to disclose a system information message including a "common identity for the multiple core networks sharing the common access network". Claim 17 is thus patentably distinguished over Mildh.

Discussion of Claim 25

Regarding Claim 25, Mildh fails to disclose a

... method in a communication device, the method comprising:
receiving information about multiple core networks sharing a common access network,
the information including at least one of identities of at least some of the multiple core networks sharing the common access network, core network domain information, information on services supported by at least some of the multiple core networks sharing the common access network;
selecting a core network to which the communication device attempts to connect using the information received.

Mildh discloses selecting among different access networks, i.e., GERAN or UTRAN access technologies. The various passages of Mildh referenced by the Examiner do not support the asserted rejection. At paragraph [0009], Mildh discusses providing a mobile station (MS) with operating mode instructions when the MS enters a cell supporting 2G and 3G operation based on MS history. At paragraph [0010], Mildh discusses network selection hysteresis control. In Mildh, at paragraph [0015], access network selection (GERAN or UTRAN) is based on registration information in the HLR, wherein the network selects the access technology for the mobile station. Contrary to the Examiner's assertion, there is no disclosure in Mildh that the mobile station receives "... information including at least one of identities of at least some of the multiple core networks sharing the common access network, core network domain information, information on services supported by at least some of the multiple core networks sharing the common access network" as in Claim 25. Claim 25 is thus patentably distinguished over Mildh.

Discussion of Claim 34

Regarding Claim 34, Mildh does not disclose a

... method in a communications network entity, the method comprising:
receiving preferred core network information from a communication device;
selecting a core network for the communication device;
giving consideration to the preferred core network information received from the communication device when selecting the core network for the communication device.

Mildh discloses selecting among GERAN or UTRAN technologies. According to Mildh, at paragraph [0015], the selection is based on registration information in the HLR, wherein the network selects the technology for the mobile station. At paragraph [0035], Mildh alternatively permits the terminal to select the technology based on information stored in a SIM card on the terminal. At paragraph [0036], in Mildh, the mobile station selects a mode of operation based on its current mode upon entering a new cell. At paragraphs [0037-38], Mildh discusses the BSC control the operating mode of the mobile station. At paragraph [0039], Mildh discloses that the mode change occurs during a cell change, location area change, routing area change, or service area change. Contrary to the Examiner's assertion Mildh does not disclose receiving "... preferred core network information from a communication device" and gives "...consideration to the preferred core network information received from the communication device when selecting the core network for the communication device." Claim 34 is thus patentably distinguished over Mildh.

Discussion of Claim 35

Regarding Claim 35, Mildh fails to disclose in combination with the limitations of Claim 34 "... receiving the at least one preferred core network from a communication device in a connection request from the communication device." The network in Mildh does not receive "preferred core network information" from the mobile station. Claim 35 is thus further patentably distinguished over Mildh.

Arguments re: Costa

Rejection Summary

Claims 14-16, 25, 27-28, 30, 32-33 and 36 stand rejected under 35 USC 102(e) for anticipation by U.S. Patent No. 7,280,516 (Costa).

Discussion of Claim 14

Regarding Claim 14, Costa fails to disclose a

... method in a communication device, the method comprising:
receiving system information,
the system information including pointer information indicating
where the communication device may obtain information about
multiple core networks sharing a common access network from which
the system information was received;
attempting to connect to one of the multiple core networks using
the information about multiple core networks sharing the common
access network from which the system information was received.

Claim 14 is directed to providing a communication terminal with "pointer information" about multiple core networks that share a common access network. Costa discloses a BSS that switches packet transmission from a mobile station (MS) to either a 2G or 3G core network based on the capability of the MS or based on the identity of the cell in which the MS is located. The various passages of Costa referenced by the Examiner do not support the asserted rejection. At col. 2: 13-27, Costa discusses the migration from 2G to 3G networks. At col. 4: 43-51, Costa discusses the factors on which the BSS switches packet transmission from a mobile station (MS) to either a 2G or 3G core network. At col. 5: 56-col. 6: 5, Costa discusses location area (LA)

identifiers for overlapping 2G and 3G networks, wherein the first bit in the LA identifier is used to indicate whether the LA is a 2G or 3G network. While Costa refers to the first bit as a pointer, Costa does not disclose that the pointer indicates "... where the communication device may obtain information about multiple core networks sharing a common access network from which the system information was received...." At most, Costa points to a single network, not "multiple networks". Moreover, there is no disclosure that the MS in Costa attempts "... to connect to one of the multiple core networks using the information about multiple core networks sharing the common access network from which the system information was received." As noted above, in Costa, the BSS directs packets to the 2G or 3G core network based on the MS type or based on the cell in which the MS is located. Claim 14 is thus patentably distinguished over Costa.

Discussion of Claim 15

Regarding Claim 15, Costa fails to disclose in combination with the limitations of Claim 15,

... selecting the one of the multiple core networks to which the communication device attempts to connect using the information about multiple core networks sharing the common access network from which the system information message was received.

In Costa, the BSS directs packets to the 2G or 3G core network based on the MS type or based on the cell in which the MS is located. There is no disclosure in Costa that the MS selects the core network. Claim 15 is thus further patentably distinguished over Costa.

Discussion of Claim 16

Regarding Claim 16, Costa fails to disclose in combination with the limitations of Claim 14 "... obtaining an identity for the core network to which the communication device attempts to connect using the pointer information." Costa discloses only that the first bit identifies a 2G or 3G network, not that the MS in Costa obtains an identity of the core network. Claim 16 is thus further patentably distinguished over Costa.

Discussion of Claim 25

Regarding Claim 25, Costa fails to disclose a

... method in a communication device, the method comprising:
receiving information about multiple core networks sharing a common access network,
the information including at least one of identities of at least some of the multiple core networks sharing the common access network, core network domain information, information on services supported by at least some of the multiple core networks sharing the common access network;
selecting a core network to which the communication device attempts to connect using the information received.

Costa discloses a BSS that switches packet transmission from a mobile station (MS) to either a 2G or 3G core network based on the capability of the MS or based on the identity of the cell in which the MS is located. The various passages of Costa referenced by the Examiner do not support the asserted rejection. At col. 2: 13-27, Costa discusses the migration from 2G to 3G networks. At col. 4: 43-51, Costa discusses the factors on which the BSS switches packet transmission from a mobile station (MS) to either a 2G or 3G

core network. At col. 5: 56-col. 6: 5, Costa discusses location area (LA) identifiers for overlapping 2G and 3G networks, wherein the first bit in the LA identifier is used to indicate whether the LA is a 2G or 3G network. While Costa refers to the first bit as a pointer, Costa does not disclose that the pointer indicates the "... identities of at least some of the multiple core networks sharing the common access network, core network domain information, information on services supported by at least some of the multiple core networks sharing the common access network...." Moreover, there is no disclosure that the MS in Costa selects "... a core network to which the communication device attempts to connect using the information received." As noted above, in Costa, the BSS (not the MS) directs packets to the 2G or 3G core network based on the MS type or based on the cell in which the MS is located. Claim 25 is thus patentably distinguished over Costa.

Discussion of Claim 27

Regarding Claim 27, Costa fails to disclose a

... wireless communications system information message stored on a computer-readable medium, the communications system information message comprising:
an information block,
the information block including a data field for a number indicating how many core networks share a common access network.

At col. 5: 56-col. 6: 5, Costa discusses location area (LA) identifiers for overlapping 2G and 3G networks, wherein the first bit in the LA identifier is used to indicate whether the LA is a 2G or 3G network. While Costa refers to the first bit as a pointer, Costa does not disclose that the pointer includes

"... a data field for a number indicating how many core networks share a common access network" At most, Costa points to a single network. Claim 27 is thus patentably distinguished over Costa.

Discussion of Claim 30

Regarding Claim 30, Costa fails to disclose a

... wireless communications system information message stored on a computer-readable medium, the communications system information message comprising:
an information block,
the information block including a pointer to a location where identities for multiple wireless communications core networks sharing a common access network may be obtained.

At col. 5: 56-col. 6: 5, Costa discusses location area (LA) identifiers for overlapping 2G and 3G networks, wherein the first bit in the LA identifier is used to indicate whether the LA is a 2G or 3G network. While Costa refers to the first bit as a pointer, Costa does not disclose that the pointer identifies "... a location where identities for multiple wireless communications core networks sharing a common access network may be obtained." At most, Costa points to a single network. Claim 30 is thus patentably distinguished over Costa.

Discussion of Claim 32

Regarding Claim 32, Costa fails to disclose a

... wireless communications system information broadcast message stored on a computer-readable medium, the communications system information broadcast message comprising:
an information block,
the information block including a pseudo network identity identifying multiple core networks sharing a common access network.

At col. 5: 56-col. 6: 5, Costa discusses location area (LA) identifiers for overlapping 2G and 3G networks, wherein the first bit in the LA identifier is used to indicate whether the LA is a 2G or 3G network. While Costa refers to the first bit as a pointer, Costa does not disclose that the pointer includes "... a pseudo network identity identifying multiple core networks sharing a common access network." At most, Costa points to a single network. Claim 32 is thus patentably distinguished over Costa.

Discussion of Claim 33

Regarding Claim 33, Costa fails to disclose a

... wireless network connection request message stored on a computer-readable medium, the network connection request message comprising:
an information block,
the information block including a data field for indicating that a network entity may select, on behalf of a communication device, one of a plurality of core networks sharing a common access network.

At col. 5: 56-col. 6: 5, Costa discusses location area (LA) identifiers for overlapping 2G and 3G networks, wherein the first bit in the LA identifier is used to indicate whether the LA is a 2G or 3G network. While Costa refers to the first bit as a pointer, Costa does not disclose that the pointer includes "...a data field for indicating that a network entity may select, on behalf of a

communication device, one of a plurality of core networks sharing a common access network." That the BSS in Costa selects the core network to which packet are directed does not correspond to an indication to the MS that the BSS will make such a selection. Claim 33 is thus patentably distinguished over Costa.

Arguments re: Haumont

Rejection Summary

Claims 25-26 and 36-38 stand rejected under 35 USC 102(e) for anticipation by U.S. Publication No. 2004/0258019 (Haumont).

Discussion of Claim 26

Regarding Claim 26, Haumont fails to disclose a

... method in a communication device, the method comprising:
receiving information about multiple core networks sharing a common access network,
the information including at least one of identities of at least some of the multiple core networks sharing the common access network, core network domain information, information on services supported by at least some of the multiple core networks sharing the common access network;
selecting a core network to which the communication device attempts to connect using the information received.

At paragraph [0006], Haumont discusses forwarding an MS terminal identity between core networks sharing a common RAN. At paragraph [0018], Haumont discusses a network element that extracts a terminal (MS) identity from a signaling message generated at a RAN. At

paragraph [0038] Haumont discusses forwarding an MS terminal identity between core networks sharing a common RAN when the MS send an initial message to the core network or when the MS contact the wrong core network, or when the MS establishes a call through the other core network. At paragraph [0041], Haumont discusses a routing area update or other attach message routed to the core network. At paragraph [0043], Haumont discusses how the core network evaluates the attach message from the MS to determine whether it is the appropriate node to serve the MS. Contrary to the Examiner's suggestion, Haumont does not disclose a communication device that receives "... information including at least one of identities of at least some of the multiple core networks sharing the common access network, core network domain information, information on services supported by at least some of the multiple core networks sharing the common access network...." Moreover, Haumont does not disclose a communication device that selects "... a core network to which the communication device attempts to connect using the information received." Claim 25 is thus patentably distinguished over Haumont.

Prayer For Relief

In view of any amendments and the discussion above, Kindly withdraw the rejections of claims and allow the application to issue as a United States Patent without further delay.

KUCHIBHOTLA ET AL.
"Wireless Radio Network Resource Sharing
Among Core Networks And Methods"
Atty. Docket No. CS23738RL

Appl. No. 10/680,522
Confirm. No. 5055
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Respectfully submitted,

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